

Procedure No. 5-08

Assessing the Reliability of Computer-Processed Data

Background

Government Auditing Standards (7.59 – 7.61) require that auditors should obtain sufficient, competent, and relevant evidence that computer-processed data are valid and reliable when these data are significant to the auditors' findings. This work is necessary regardless of whether the data are provided to auditors or auditors independently extract them. GAO's *Assessing the Reliability of Computer-Processed Data*, which supports the Yellow Book, provides additional guidance for this standard.

Government Auditing Standards 7.59 – 7.61

7.59 Validity and reliability of data from computer-based systems: Auditors should obtain sufficient, competent, and relevant evidence that computer-processed data are valid and reliable when these data are significant to the auditors' findings. This work is necessary regardless of whether the data are provided to auditors or auditors independently extract them. Auditors should determine if officials of the audited entity or other auditors have worked to establish the validity and reliability of the data or the effectiveness of the controls over the system that produced the data. If the results of such work are current, auditors may be able to rely on that work. (See paragraphs 7.32 through 7.34 for requirements when relying on the work of others.) Auditors may also determine the validity and reliability of computer-processed data by direct tests of the data.

7.60 Auditors can reduce the direct tests of the data if they test the effectiveness of general and application controls over computer-processed data and these tests support the conclusion that the controls are effective. If auditors determine that internal controls over data that are significantly dependent upon computerized information systems are not effective or if auditors do not plan to test the effectiveness of such controls, auditors should include audit documentation regarding the basis for that conclusion by addressing (1) the reasons why the design or operation of the controls is ineffective, or (2) the reasons why it is inefficient to test the controls. In such circumstances, auditors should also include audit documentation regarding their reasons for concluding that the planned audit procedures, such as direct tests of the data, are effectively designed to achieve specific audit objectives. This documentation should address

- a.** the rationale for determining the types and extent of planned audit procedures;
- b.** the kinds and competence of available evidence produced outside a computerized information system; and
- c.** the effect on the audit report if the evidence gathered during the audit does not allow the auditors to achieve audit objectives.

7.61 When the auditors' tests of data disclose errors in the data, or when they are unable to obtain sufficient, competent, and relevant evidence about the validity and reliability of the data, they may find it necessary to

- a.** seek evidence from other sources,
- b.** redefine the audit's objectives to eliminate the need to use the data, or
- c.** use the data, but clearly indicate in their report the data's limitations and refrain from making unwarranted conclusions or recommendations.